REMARKS

The withdrawal of the final rejection in response to the amendment filed on June 28, 2005, is noted with appreciation.

A minor amendment has been made to the specification by this paper to correct a grammatical error.

Claims 2 to 8 remain in the application and are presented, without amendment, for reconsideration by the Examiner in light of the following remarks.

Claims 2 to 6 and 8 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner takes the position that "In the present case, claims 2-6 and 8 only recites [sic] an abstract idea. The recites [sic] an information retrieval apparatus does not apply, involve, use or advance the technological arts since the steps perform without a tangible embodiment (computer). Therefore non-statutory." The Examiner's position is clearly in error, and the rejection is therefore respectfully traversed.

Reference is made to MPEP 2106 Patentable Subject Matter – Computer-Related Inventions [R-2]. It is understood from the outset that the guidelines of this section do not constitute substantive rulemaking and hence do not have the force and effect of law; however, it is understood that the guidelines have been designed to assist Office personnel in analyzing claimed subject matter for compliance with substantive law and are therefore relevant in responding to this ground of rejection.

Following the guidelines,

> "[t]he claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of 'real world' value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197,

> 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.
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> ". . .Office personnel have the burden to establish a prima facie case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result. Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101. Compare Musgrave, 431 F.2d at 893, 167 USPQ at 289; In re Foster, 438 F.2d 1011, 1013, 169 USPQ 99, 101 (CCPA 1971). Further, when such a rejection is made, Office personnel must expressly state how the language of the claims has been interpreted to support the rejection."

In making the rejection, the Examiner (1) has not recognized that the claimed invention as a whole accomplishes a practical application, i.e. it produces a useful, concrete and tangible result, and (2) has not met the burden of establishing a prima facie case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result, i.e., the Examiner has not expressly stated how the language of the claims has been interpreted to support the rejection.

The disclosed and claimed invention is directed to an information retrieval apparatus having a data monitoring and content judging means for monitoring a document retrieved from a database and inferring a field which the said document belongs to, and a retrieval screen generating means for generating a retrieval screen for allowing a user to perform a retrieval operation taking the inferred field as an object of retrieval and outputting the retrieval screen as data to be displayed together with said retrieved document.

The embodiment shown in Fig. 1 comprises an input/output device 100 capable of inputting a retrieval condition and the like and displaying a result of retrieval, a database 200 containing a document to be an object of retrieval, and an information retrieval apparatus 300 for providing an exact retrieval function

meeting a retriever's intention. The information retrieval apparatus 300 is provided with a data monitoring portion 310 for monitoring data sent by the database 200 to the input/output device 100, the data being data of a document to be an object of retrieval requested by a user using the input/output device 100, a content judging portion 320 for identifying the kind of a content by referring to the content of the data and determining whether or not a retrieval screen is to be generated, and a retrieval screen generating portion 330 for generating a retrieval screen adaptive to the content. A user requests a document to be an object of retrieval from the database 200, using the input/output device 100. The database 200 communicates a document to be an object of retrieval requested by the user to the input/output device 100 through a network communication and the like. The data monitoring portion 310 of the information retrieval apparatus 300 monitors communication of the document to be an object of retrieval from this database 200 to the input/output device, obtains this document, and notifies the content judging portion 320 of this fact. The content judging portion 320 analyzes the content of this document and judges whether or not there is the possibility that the user requests retrieval. In case that the content judging portion 320 has judged that there is the possibility that the user requests a retrieval, the retrieval screen generating portion 330 sends data for retrieval to the input/output device 100. A retrieval screen generated by the retrieval screen-generating device 100. A retrieval screen generated by the retrieval screen-generating portion 330 has a function for performing retrieval on the database 200. Since a retrieval screen capable of retrieving a document related to a document to be an object of retrieval spontaneously requested by a user is generated and provided to the user, the user does not need to search another document to be an object of retrieval or input detailed retrieval conditions for the retrieval, thereby reducing a burden of retrieval on the user to a necessary minimum.

In a specific example, various HTML documents on the Internet are stored in the database 200. Through a browser operating on the input/output device 100, a user can browse these WWW documents, and browse different documents one after another by referring to links contained in these documents. The browser on the input/output device 100 communicates with the database 200 through a

network, and sends and receives a WWW document. A WWW document to be sent may be a reference of WWW documents of the database 200 or a retrieval request to the server of the database 200. A WWW document to be received is a WWW document itself of the database 200. However, it may be a WWW document originally existing in the database 200 or a WWW document dynamically produced by the server of the database 200.

Looking at the claims, claim 2 recites "An information retrieval apparatus", shown at reference numeral 300 in Figure 1. This information retrieval apparatus comprises "a data monitoring **[310]** and content judging **[320]** means for monitoring a document retrieved from a database **[200]** in inferring a field to which this document belongs, and a retrieval screen generating means **[330]** for generating a retrieval screen for a user to perform a retrieval operation taking the inferred field as an object of retrieval and outputting the retrieval screen as data to be displayed together with said retrieved document". Further, according to the recitation in claim 2, "a document retrieved from said database is a structured document, and said retrieval screen is a screen of a structured document in which screen a retrieval part is embedded in the retrieved structured document and a user can retrieve." Clearly, the recited invention belongs to the "technological arts", and the invention "produces a useful, concrete and tangible result". The rejection is in error, and therefore withdrawal of the rejection is respectfully requested.

Claims 2 to 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,848,410 to Walls et al. in view of U.S. Patent No. 5,848,407 to Ishikawa et al., newly cited in the Office Action mailed on July 20, 2005. The rejection is respectfully traversed for the reason that the combination of Walls et al. and Ishikawa et al. fail to show or suggest the claimed invention.

Walls et al. disclose a continuously updated computer organization and display system, and a method for such an organization and display system, to quickly locate desired documents in a large database, such as the World Wide Web of the Internet or a group intranet, without generating references to undesired documents, and to quickly allow a user to determine if any documents of interest are available. The Walls et al. organization and display system includes data structures for storing and processing information extracted from the header lines

of web pages in file systems chosen by a user. Linked lists are created in the data structures to allow rapid construction and display of an alphabetical index of keywords from the header lines, each keyword having associated with it a title extracted from the same web-page header. The alphabetical index by keywords may be displayed on a file that permits the user readily to jump to a desired location in the alphabetical index. Alternatively, the user may search the alphabetical index to find titles or keywords that correspond with an entered character string. A user may select a title in the index and view the file from which the title was extracted.

Applicants in their specification at pages 2 and 3 acknowledge that necessary information is often retrieved and utilized by using an information retrieval service on the World Wide Web (WWW). However, typically an information retrieval is generally performed on the WWW using an information retrieval request represented by a combination keywords. Applicants note that a beginner being unfamiliar with a computer cannot properly present a combination of keywords for exactly representing the desired formation, and therefore has difficulty in exactly retrieving the desired formation. Applicants also acknowledge a conventional technique for performing an exact information retrieval extracting a retriever's intention by means of interaction between the retriever and the apparatus using a natural language in order to perform and exact retrieval. In this case, the information retrieval apparatus infers an inexplicit idiomatic expression or an abbreviated word being liable to be used in a natural language from the context of this interaction, and produces a retrieval request meeting the retriever's intention. Applicants note that WWW pages typically contain a collection of link destinations of a certain kind of information, and a user can obtain a great amount of related information at a time by browsing these WWW pages. However, since such pages are often made by gathering and arranging various formation by hand, it is difficult to cover all the related information. Therefore, in case of desiring further information, a user needs to move to a page for retrieval and perform retrieval in consideration of its retrieval conditions. It is conceivable also to make a page for retrieval using the information retrieval apparatus, but in such a case even if an inexplicit idiomatic expression or an abbreviated word is allowable,

eventually a retriever results in being forced to input a natural language and in bearing a burden equivalent to or heavier than inputting keywords. And it is necessary to analyze in advance a sentence straightforwardly representing the content of a document to be retrieved and additionally it is necessary to prepare a concept dictionary at the information retrieval apparatus side, and therefore construction of such an apparatus requires such a great cost that it is not practical.

Thus, Applicants have acknowledged prior art such as represented by Walls et al. and, further, the possibility of combining such prior art with a natural language input engine, but even then there is a considerable burden on the user. What Applicants have provided in their invention is an information retrieval apparatus comprising "a data monitoring **[310]** and content judging **[320]** means for monitoring a document retrieved from a database **[200]** in *inferring* a field to which this document belongs, and a retrieval screen generating means **[330]** for generating a retrieval screen for a user to perform a retrieval operation taking the *inferred field* as an object of retrieval and outputting the retrieval screen as data to be displayed together with said retrieved document" (emphasis added), as recited in claim 2, for example. Claim 2 further recites that "a document retrieved from said database is a structured document, and said retrieval screen is a screen of a structured document in which screen a retrieval part is embedded in the retrieved structured document and a user can retrieve." The structure recited is an information retrieval apparatus capable of performing a retrieval of exact related information by a necessary minimum input in case of desiring further related information during browsing some retrieval objects such as WWW pages. This is possible because the recited structure includes a data monitoring and content judging means for monitoring a document retrieved from a database and inferring a field to which the said document belongs. The recited structure further includes a retrieval screen generating means for generating a retrieval screen for allowing a user to perform a retrieval operation taking the inferred field as an object of retrieval and outputting the retrieval screen as data to be displayed together with said retrieved document.

In making the rejection, the Examiner acknowledges that Walls et al. do not disclose "a data monitoring and content judging means for monitoring a

document retrieved from a database in inferring a field to with [sic] this document belongs." This, of course, is the very heart of the claimed invention, and the Examiner's recognition that Walls et al. do not disclose such data monitoring and content judging means is an acknowledgment by the Examiner of the irrelevance of the Walls et al. patent as a reference against the claimed invention.

The Examiner relies on the patent to Ishikawa et al. for allegedly disclosing a data monitoring and content judging means. What Ishikawa et al. actually disclose is an apparatus wherein a hypertext document and anchor sentences of parent documents for the hypertext document are registered with an hypertext document identifier as document information for each of hypertext documents having reference relationships with each other. A user can refer to one hypertext document according to an anchor sentence of another hypertext document functioning as a parent document. Occurrence positions of one word in hypertext documents and parent documents are registered as word information for each of words. When a keyword is input, a plurality of particular hypertext documents and particular parent documents in which the keyword appears are specified according to the word information, one particular hypertext document and corresponding particular parent documents are unified to a unified hypertext document for each particular hypertext document, an occurrence frequency of the keyword in each unified hypertext document is calculated according to the document information, importance degrees of the unified hypertext documents are calculated as those of the particular hypertext documents according to the occurrence frequencies, and ranking of the particular hypertext documents are determined according to those importance degrees. Because the occurrence frequency is calculated by considering the parent documents, the particular hypertext documents can be appropriately ranked.

Here again, Ishikawa et al. use keywords, albeit keywords in hypertext documents. Ishikawa et al. rank these keywords by frequency of occurrence. However, contrary to the Examiner's assertion, there is nothing in Ishikawa et al. concerning "a data monitoring and content judging means for monitoring a document retrieved from a database in *inferring* a field to which this document belongs" as specifically recited in claim 2. Since neither of Walls et al. nor

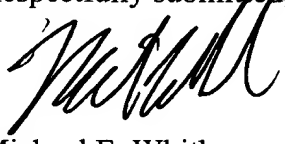
Ishiwawa et al. suggest a retrieval operation taking the inferred field as an object of retrieval and outputting the retrieval screen as data to be displayed together with said retrieved document, it is clear that the combination of the two also do not suggest such an operation.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 2 to 8 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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